matory action was usually confined to the glands in the lower third of the ileum, but in three or four cases the whole of the patches from the jejunum downwards were affected. In some of the larger glands isolated foci of inflammatory action were occasionally observed. The interfollicular ridges were often the eighth of an inch wide, giving to the paler glands a spongy appearance; but these ridges were as often vascular, with fine hair-like turgid vessels, and in some cases they were prolonged into folds a quarter of an inch in length. In two or three cases an almost bleeding gland had a softened, abraded surface. The mucous membrane of the ileum was itself severely inflamed in two or three cases, and was covered by a thick, adherent layer of white, opaque mucus. The solitary glandulæ of the large intestine were enlarged and inflamed in eight cases. In one of these there was acute desquamation of the mucous membrane of nearly the whole of the bowel. In another case the cæcum was severely congested. In those of the remaining cases in which the large intestine was examined, it was quite healthy.

On taking the above described pathological conditions into one general view, it appeared that there was an increase of fibrin in the blood during an attack of scarlatina, and that death was likely to occur during the first week from its deposition in the heart and great vessels; that the condition of the biliary function was such as to lead to an outbreak of diarrhœa, if this had not already happened; that a latent enteritis, sometimes general, but commonly only affecting the solitary and agminated glands, existed in a high state of development during the pyrexial stage of scarlatina, ready to declare itself openly upon very slight provocation; that this intestinal affection was only a part of a general lymphatic inflammation involving the whole of the lymphatic system, including the mesenteric glands and the spleen in one common action; and, further, that this condition might persist in some degree, either in the bowel or the mesentery, as late as the sixty-ninth day, and without any outward indication of its presence throughout.

From this view one general conclusion was inevitable—viz., that the pathological changes accompanying an ordinary attack of scarlatina included all those of the first stage of enteric fever, and that the transition from one disease to the other was but a natural pathological sequence, readily determined by any cause which might increase the intestinal irritation.

The proofs of this interchange, or sequence, constituted the second part of the subject, and contained accounts of several original observations.—*Brit. Med. Journal*, Dec. 23, 1871.

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18. *Unilateral Atrophy of Tongue.*—Mr. Wm. Fairlie Clarke communicated the following interesting case of this to the Royal Medical and Chirurgical Society, November 28, 1871: Mrs. H., aged 45, had a malignant tumour removed from her right breast on February 16, 1870. The wound healed slowly, but satisfactorily. On April 15 she complained of cough and slight dyspnœa, the latter only noticeable after exercise. Under treatment, the cough soon disappeared, but the dyspnœa still continued. On October 3, Mr. Hume, of Islington, was called suddenly, and found her suffering from a deep-seated pain on the right side of the head, of periodic character, returning each night between 1 and 2 o'clock A.M., and rendering her for some hours incoherent and unmanageable. The only thing which gave her relief was morphia in grain doses. At this date, atrophy of the tongue was first noticed, though it was not then so marked as it afterwards became. On March 29, 1871, Mr. Hume was again urgently required to attend, and found the patient suffering from all the old symptoms in an aggravated degree; she had also alarming dysphagia, with paroxysms of suffocation, which recurred about three times in the twenty-four hours. On being asked to protrude the tongue, she always appeared unable to do so at first; and, after a few moments, put it out very slowly. The tongue was puckered and crimped along its whole right side from base to apex, mostly at the anterior two-thirds. An actual loss of substance had taken place, but it was bounded exactly by the median raphé; and the contrast between the plumpness of the left side and the shrivelled aspect of the right was very striking. When it was protruded, there was no

deviation to either side. Articulation was slow and difficult. There was great pain along the right side of the neck, with a certain fulness and turgescence of the vessels; but no tumour could be felt in any part of the mouth or neck. Together with these symptoms, there were general cachexia and great prostration. From this time the dysphagia and dyspnœa gradually became worse; and on June 7, in one of the attacks of suffocative cough, the patient died. At no time during her illness had there been any paralysis of the extremities, and her intellectual faculties remained clear throughout.

Unfortunately, no necropsy could be obtained; but, looking at all the circumstances of the case, Mr. Clarke thought there was good reason to believe that the ninth nerve on the right side was involved in a secondary cancerous tumour, such tumour being situated either within the cranium or at the upper part of the neck, and pressing upon the right hypoglossal nerve, and more or less implicating the pneumogastric and glosso-pharyngeal nerves as well.

The writer then proceeded to compare with this case two other instances of well-marked unilateral atrophy of the tongue; the one related by Dupuytren in the *Leçons Orales* (lecture on hydatid tumours); the other by Sir James Paget, in the third volume of the *Transactions of the Clinical Society*. The experience of Romberg and of Bidder was adduced to show that this remarkable condition of the tongue might be produced by a lesion of the ninth nerve; and to establish the same point the author related an experiment that he had made. On October 25, he divided the right hypoglossal nerve in a rabbit, and took out a piece about a quarter of an inch in length. Immediately after the operation, and during the whole time that the animal was under observation, the tongue was strongly protruded to the right side. On November 27 the rabbit was killed. It was found that the nerve had united by a soft, gelatinous, and highly vascular substance, of about twice the ordinary calibre of the nerve. The right side of the tongue, along its posterior half, was slightly wasted and flattened.

The preparation was exhibited; and an outline sketch, illustrating the case which had been related, also accompanied the paper.

Dr. John Harley agreed that the lesion of the tongue in Mr. Clarke's case was probably due to cancer pressing on the ninth nerve. But lateral deviation of the tongue also took place in some cases of scarlet fever, where the deeply-seated glands of the neck were enlarged and pressed on the hypoglossal nerve. He had met with this in a lad aged 15, who had also occipital pain and vomiting; the tongue deviating to the right when protruded. Dr. Charlton Bastian thought it by no means certain that atrophy of the tongue was always produced by paralysis of the hypoglossal nerve. At the Hospital for Paralysis and Epilepsy, he had seen a case where the only nerve that could be found affected was the sixth; the tongue was much wasted, but the deviation was very slight; and when the wasted half was tested by faradization, decided contraction took place. Dumesnil had a case of general muscular atrophy with paralysis of the tongue and face on one side; there was complete paralysis of the hypoglossal nerve, but no wasting of the tongue. The anterior roots of many of the spinal nerves were much atrophied; as also were the roots of the facial and hypoglossal nerves, while those of the fifth pair were healthy. Dr. Jaccoud, in referring to this case, explained it by supposing that the sympathetic or trophic nerve-fibres went to the tongue with the branches of the fifth rather than with those of the motor nerves. Dr. Habershon referred to the case of a woman in Guy's Hospital in whom, while she was suffering from cancer of the breast, the right side of the tongue became flaccid and wrinkled, the organ being turned to the right. Speech and the sensation of the organ were unimpaired. The right sterno-hyoid muscle was paralyzed; and the posterior belly of the omo-hyoid contracted on each side. The patient had pain at the back of the head, and pain and tenderness down the spine. After death (which took place from wasting), numerous soft cancerous tubera were found implicating the bones of the skull and the dura mater; and one of them crept up from the foramen magnum to the internal auditory meatus, involving the eighth and ninth nerves. The proximity of the disease to the meatus explained a slight affection of the facial nerve which had been noticed during life. The affection of the tongue was evidently due to the interference with its nerves by the medullary cancerous growths. Dr. Hughlings Jackson thought Mr. Clarke's case a very rare one. In no instance had he seen palsy of the tongue, either on one side or on both sides, without palsies of other parts. Thus, in a case of syphilitic disease there was palsy of the left portio dura and eighth nerves, as well as of the left ninth nerve. In a case of a tumour of the medulla oblongata and pons Varolii, there was palsy of the fifth, sixth, seventh, and eighth nerves, as well as of the ninth, on the left side, and paralysis of the right arm and leg. He mentioned a case of a man who found out one morning that he was hoarse, and that his tongue was turned to one side "like a hook." There was palsy, with wasting, of the right side of the tongue, paresis of the right side of the palate, and palsy of the right vocal cord. As the man was past fifty years of age, as he had albuminuria, and as the symptoms came on in one night, the probability was that they were the result of a clot. In one case of sudden palsy of the tongue, palate, and orbicularis oris which he had seen, Dr. Lockhart Clarke discovered relics of effusion of blood in the medulla. Dr. Lockhart Clarke's researches, showing the close relation of the lingual and spinal accessory nuclei, gave the explanation of cases of lesions in the medulla producing palsies of the several factors concerned in articulation, deglutition, and voice. Dr. Hughlings Jackson had never seen wasting of the tongue from paralysis of the fifth nerve, although the temporal and masseter muscles wasted. Dr. William Ogle referred to a case related by Dr. Hyde Salter in his article on the tongue in the *Cyclopædia of Anatomy*, in which paralysis and atrophy of the tongue were produced by a wound of the neck injuring the hypoglossal nerve. He had often divided the hypoglossal nerve in animals, and had found that the tongue did not always deviate towards the side of the lesion; sometimes it was protruded straight, sometimes it was even turned a little to the opposite side. This last occurrence was difficult to explain; it might occur in cases of disease of brain, where the lesion was double; or possibly the observation might be made when the tongue was partially withdrawn after protrusion, and when, from a reversal of the muscular action, it would appear somewhat pushed to the other side. Section of the hypoglossal nerve caused the tongue to be as it were turned up, the paralyzed side being the higher. He asked if this had been noticed in disease. Dr. Hilton Fagge had seen a case of unilateral atrophy of the tongue in a boy aged 5½ years. A piece of the odontoid process was found sticking up through the dura mater. Mr. Thomas Smith thought the action of the genio-hyo-glossus muscle sufficient to draw the tongue over to the paralyzed side. This muscle protruded the organ; which, when outside the mouth, was moved by the stylo-glossus muscle; and this, or the lingualis, might draw the tongue towards the sound side. Mr. Henry Power said that the theory of the existence of trophic nerves was almost entirely based on observations of the effect of injury of the fifth nerve on the eye. He thought, however, that little if anything was known regarding trophic nerves. In Mr. Clarke's case, he thought the lesion was not connected with the fifth nerve, but with the hypoglossal. In the case of the eye, he believed that the increased liability to inflammation after injury of the fifth nerve arose from the organ being more exposed to injurious influences acting from without. Mr. Soelberg Wells referred to some experiments of Meissner, in which sloughing of the cornea did not occur after experiments on the fifth nerve unless the innermost fibres were divided.—*Brit. Med. Journ.*, Dec. 9, 1871.

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19. *Hysteria*—Dr. EDW. J. TILT gives (*Brit. Med. Journ.*, Dec. 16, 1871) the following as his views of hysteria: "I think it requires two factors for its production—1. A predisposing nervous state; 2. The stimulus of some determining cause.

"Of the predisposing cause, we may safely say that it must depend on that modification of the nervous system which makes the nervous system of woman more prone to emotion than her mate; otherwise, how is it that the disease is in the main feminine, and only met with in men whose nervous systems are built on the feminine type? We moreover know that, although a disease of every climate and social condition, hysteria is most frequent in women of the upper classes of the civilized races, in whom emotionalism is intensified,